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NIVA Study No.: 190167
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TEST REPORT

Determination of the 72 hour toxicity of OSE II to the marine algae *Skeletonema pseudocostatum*

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The results are valid for the tested sample only.

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PERSONNEL INVOLVED IN THE STUDY

Name and Company	Title	Function
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Tânia Gomes, NIVA	Research scientist	Test personnel
Adam Lillicrap, NIVA	Research manager	Test Facility Manager

TIME SCHEDULE

Study initiation date: 25th February 2020
Start of test: 25th February 2020
Completion of test: 28th February 2020

REPORT APPROVED BY GLP MANAGER

GLP Manager:  Date: 24.04.2020

Adam Lillicrap
Research Manager
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SUMMARY

The inhibitory effects of OSE II on the growth of the marine microalgae *Skeletonema pseudocostatum*, strain NIVA BAC 1, was investigated. The test was performed according to ISO 10253:2016, Water quality – Marine algal growth inhibition test with *Skeletonema* sp. and *Phaeodactylum tricornutum*. ISO/TC 147/SC 5 Biological methods, ICS:13.060.70, 19p (1).

A series of test solutions were prepared by dissolving different concentrations of the test substance OSE II in ISO media 10253 (1 µL/L, 3.2 µL/L, 10 µL/L, 32 µL/L and 100 µL/L), plus a control.

The test solutions were inoculated with approximately 5×10^3 cells/mL of an exponentially growing culture of *Skeletonema pseudocostatum*. Three replicates of each concentration were incubated in 25 mL glass flasks with 15 mL test volume in an incubator with orbital shaking, set to 20 ± 2 °C and under continuous light. Six replicate cultures in growth medium were used as controls. Growth was monitored using a coulter counter at 24, 48 and 72 hours.

The test substance showed no effects in *Skeletonema pseudocostatum* growth. The results of the study are summarised as follows:

Endpoint	Test substance
	OSE II (µL/L)
	72 h
EC ₅₀	n.d.
EC ₅₀ 95%-CL lower	n.d.
EC ₅₀ 95%-CL upper	n.d.
LOEC	>100
NOEC	≥100

Where:

EC₅₀ – effective concentration for 50% reduction

95% – CL 95 – confidence limits

LOEC – lowest observed effect concentration

NOEC – no observed effect concentration

n.d. - not determined